and the timestamp for the end of the BLN backup event. Preferably, scheduling services

110 may activate activities as one-time occurrences or as recurring on an hourly, daily,

weekly, monthly, or yearly basis. Monthly recurrence may be scheduled as a particular

date and time of day each month or as a particular day of the week and time of day each

month. Scheduling services 110 may be implemented using AppWorx which is available

AppWorx Corporation USA   Bellevue, WA

from ___↑___ of ___↓___ or using the Windows scheduling program component of the *Iw*   *11/15/07*

Windows 98, XP, or NT operating systems, which are available from Microsoft

Corporation of Redmond, Washington.

Transaction services 118 receive data in a common data format from data

collector services 114 and provide the data to data provider 20 for populating the data

structures of database 18. Each transaction service of transaction services 118 uses the

common database instructions for communicating data with data provider 20, which

provides the data through the API of the appropriate database component of database 18

in which the data is to be stored.

Data collector services 114, Fig. 2A, include activities that may be activated by

scheduling services 110 for the purpose of providing data from an external data source

120 in a common data format to a transaction service 118 (Fig. 3). Preferably, the native

format data of external data sources 120 are converted to an XML schema, although

common data representation schema may be used. Transaction service 118 reads the

collected data and uses it to populate the data structures of database 18. Also, an

application solution(s) 30a-30n may activate a data collector service 114 to obtain data

from an external data source 120 (Fig. 3). Any application 30a-30n activating a data

collector service 114 to obtain data, preferably, contains logic for communicating with